

a7 sub B7 30. (new) The tire of Claim 23, wherein said second rubber decoupling layer extends axially more than 3 mm beyond the lateral ends of said cords of said reinforcing row.

REMARKS

Claim 1-22 were pending. Claims 2, 3, 4/2, 4/3, 5/2, 6-8/5/2, 9/8/5/2, 10/5/2, 11-13/10/5/2, 14-16/5/2, 17/15/5/2, 18/17/15/5/2, 19/15/5/2, and 20-22/5/2 have been withdrawn by the Examiner from consideration as drawn to a non-elected invention. Claims 1 and 5-22 have been amended, claim 4 has been canceled, and new claims 23-30 having been added. As such, claims 1-3 and 5-30 are pending.

The amendments and new claims are fully supported by the specification, claims and, drawings as originally filed, and thus do not constitute new matter. Specifically, new independent claim 23 is supported by claim 15/5/1, and new dependent claims 24-30 are supported by claims 16-22, respectively.

Applicants gratefully acknowledge the Examiner's indication that claims 15-19 would be allowable if rewritten in independent form (Office Action at § 20); accordingly, new claims 23-30 are believed to be in allowable form.

A marked-up version of the amended claims, in which deleted text is indicated by square brackets and added text is indicated by underlining, is attached hereto as Exhibit B. A clean version of the pending claims, as amended, is attached hereto as Exhibit C.

The Restriction Requirement

In a telephone call to Applicants on June 6, 2002, in which the Examiner presented a restriction requirement, Applicants orally made with traverse a provisional election

of Claims 1, 4/1, 5/1, 6-8/5/1, 9/8/5/1, 10/5/1, 11-13/10/5/1, 14-16/5/1, 17/15/5/1, 18/17/15/5/1, 19/15/5/1, and 20-22/5/1 of Group I. Pursuant to 37 C.F.R. § 1.142(b), claims 2, 3, 4/2, 4/3, 5/2, 6-8/5/2, 9/8/5/2, 10/5/2, 11-13/10/5/2, 14-16/5/2, 17/15/5/2, 18/17/15/5/2, 19/15/5/2, and 20-22/5/2 have been withdrawn from consideration as drawn to a non-elected invention.

Priority

The Examiner has requested evidence that the instant application's claim of benefit is proper (Office Action at § 4). In response, Applicants enclose herewith copies of PCT documents evidencing that parent application PCT/EP99/07264 designated the United States and entered Chapter II.

Therefore, Applicants respectfully submit that, under 35 U.S.C. § 365(c), the instant application properly claims the benefit of parent application PCT/EP99/07263, which was copending at the time of filing of the instant application.

The Objections to the Specification Should be Withdrawn

The specification has been objected to as not containing a title that is descriptive of the invention, containing typographical errors due to scanning errors, and failing to provide proper antecedent basis for originally claimed subject matter.

The title has been amended as suggested by the Examiner (Office Action at § 6).

The specification has been amended to correct typographical errors, and to provide antecedent basis for the subject matter of Claim 22 as kindly suggested by the Examiner (Office Action at § 7). A marked-up version of the amended specification, in which deleted text is indicated by square brackets and added text is indicated by underlining, is attached hereto as Exhibit A. Withdrawal of the rejection is respectfully requested.

The Rejections Under 35 U.S.C. § 112, First Paragraph Should be Withdrawn

Claims 6-8/5/1 and 9/8/5/1 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to disclose the best mode contemplated by Applicants (Office Action at §§ 9-10). The specification has been amended to state that a preferred range for the ratio between the moduli of elasticity of the second rubber decoupling layer and the first layer is between 0.4 and 0.6 and that a more preferred range is 0.5 to 0.7. As such, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. § 112, first paragraph.

The Rejections Under 35 U.S.C. § 112, Second Paragraph Should be Withdrawn

Claims 1, 4/1, 5/1, 6-8/5/1, 9/8/5/1, 10/5/1, 11-13/10/5/1, 14-16/5/1, 17/15/5/1, 18/17/15/5/1, 19/15/5/1, and 20-22/5/1 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention (Office Action at §§ 11-12). In response, Applicants have amended the claims, as suggested by the Examiner, to more particularly point out and distinctly claim the invention. Applicants wish to thank the Examiner for detailed recommendations.

These amendments have addressed the concerns of the Examiner regarding the definiteness of the claims. As such, Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 112, second paragraph.

The Rejections Under 35 U.S.C. § 103(a) Should be Withdrawn

Claims 1, 4/1, 5/1, 6-8/5/1, 10/5/1, 11-13/10/5/1, 14/5/1, and 20-22/5/1 are rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 4,140,166 to Koyama et al. ("Koyama") in view of U.S. Patent No. 2,541,506 to Cuthbertson et al. ("Cuthbertson"), or alternatively, obvious over Cuthbertson in view of Koyama (Office Action at §§ 13, 15).

Claim 9/8/5/1 is also rejected under 35 U.S.C. § 103(a) as obvious over Koyama in view of Cuthbertson, or alternatively, obvious over Cuthbertson in view of Koyama, and further in view of Mechanics of Pneumatic Tires (Office Action at § 16).

Koyama describes a tire with a belt reinforcement made of a plurality of laminated plies having a coating rubber which has a lower modulus of elasticity at the lateral parts as compared to the central part of the belt. However, as recognized by the Examiner, Koyama does not teach a tire "wherein the two axially adjacent belt ply coating rubbers of different modulus of elasticity are . . . contacting the cords of two adjacent belt plies." (Office Action at § 15).

Cuthbertson describes a tire wherein the two breaker plies (belt reinforcement) are each formed of a rubber layer over which a layer of cords are laid (Cuthbertson at col. 2, lines 14-16). This design was intended to avoid tire failure caused by separation of the adjacent surfaces of the tread and the outer ply of the carcass. In particular, Cuthbertson sought to improve tire manufacturing processes in the 1940s and 1950s, which occasionally resulted in trapped air between the outer ply and the tread that caused tire blowouts (Cuthbertson at col. 1, lines 15-25). Specific breaker plies are used in the Cuthbertson tire, such that "the outer plies or breaker piles such as 4 and 5 are provided with the exposed cords 10 and 11, respectively (col. 2,

lines 36-41). Significantly, Cuthbertson does not teach, as admitted in the Office Action, a tire wherein "rubber layers under the belt cords have a second modulus at the axial edges less than a first modulus in the center." (Office Action at § 15).

Nevertheless, asserting that Cuthbertson teaches "belt ply coating rubber layers contacting the cords such that the belt cords are exposed to the adjacent rubber layer on the outer side and to its own coating rubber layer on the inner side in order to eliminate trapped air between the tread and adjacent belt plies," the Office Action summarily concludes that "[it] would have been obvious to one of ordinary skill in the art to provide the Koyama et al. tire with the belt ply coating rubber arrangement taught by Cuthbertson et al. in order to eliminate trapped air between the tread and adjacent belt plies." (Office Action at § 15).

Also, asserting that Koyama teaches "set[ting] the coating rubber modulus such that axial edge zones have a lower modulus than that of the center zone in order to prevent belt edge separation," the Office Action summarily concludes that "[it] would therefore have been obvious to one of ordinary skill in the art to provide the rubber layers under the belt cords in the Cuthbertson et al. tire with the modulus gradient taught by Koyama et al. in order to prevent belt separation." (Office Action at § 15). Applicants respectfully disagree.

A *prima facie* case of obviousness requires a showing of suggestion or motivation, either in the cited reference or in the ordinary knowledge of those skilled in the art, to modify the cited reference so as to arrive at the claimed invention. *See, e.g., In re Rouffet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453, 1456 (Fed. Cir. 1998) (finding failure to make a *prima facie* case of obviousness absent any evidence of teaching, suggestion or motivation to meet the claimed invention); *see also* M.P.E.P. § 2143. Applicants point out that no teaching or

suggestion has been identified within Koyama or Cuthbertson to combine their respective teachings. Additionally, no suggestion or motivation has been asserted to be found in the prior art to modify Koyama or Cuthbertson to reach the claimed invention. Rather, the Office Action relies on the skilled artisan to supply the suggestion to modify the prior art to meet the claimed invention.

The assertion that it would have been obvious to modify the tires of Koyama or Cuthbertson to arrive at the present invention is not sufficient to establish a *prima facie* case of obviousness without some objective reason to so modify the prior art references. *See* M.P.E.P. § 2143.01. The level of skill in the art simply cannot be relied upon to provide the suggestion to combine the prior art references. *See Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 U.S.P.Q.2d 1161 (Fed. Cir. 1999); *see also* M.P.E.P. § 2143.01.

There is simply nothing in the art that suggests producing a tire having at least two rubber decoupling layers of different mechanical properties in contact with cords of two superimposed reinforcing rows. Neither Koyama nor Cuthbertson teach or suggest independent layering of the belt reinforcement cords and rubber bonding layers, and therefore cannot make obvious the invention defined by amended Claim 1.

Therefore, since nothing in the prior art has been offered to suggest modifying Koyama or Cuthbertson to arrive at the claimed invention, the invention defined by independent Claim 1 and its dependent claims cannot be obvious in view of Koyama or Cuthbertson, either alone or in combination.

Moreover, Cuthbertson et al is dated April 29, 1949 and Koyama is dated February 20, 1979. Applicants respectfully submit that, given then length of time between the

publication of the cited references and the present invention, that absent the teaching of the present invention that it would not have been obvious to combine the cited art to arrive at the claimed invention.

Additionally, there is no teaching in the cited art how to make the tire of the present invention. In particular, there is no teaching in the cited art how to modify Cuthbertson to prepare a rubber layer under the belt cords having two different mechanical properties. Koyama does not teach how to make such modifications. Applicants were the first to be able to make the novel tire of the present invention through the use of a novel process in which the rubber decoupling layers are arranged directly on the cords of the radially inner belt, preferably through the spiral winding of a rubbery compound section.

Applicants further note that the present invention is a novel tire that does not require the use of laminated plies, which are traditionally made separately before the building the green tire. Rather, the Applicants have invented a novel tire comprising at least two superposed reinforcing rows formed by cords and at least two rubber decoupling layers of different mechanical properties that are in contact with the cords. Claim 1 has been amended to emphasize that the tire is not comprised of plies, such as laminated plies, but rather is composed of superposed reinforcing rows formed by cords.

Because independent claim 1 is not obvious over the cited art, the dependent claims are also not obvious over the cited art and are allowable. Withdrawal of the claim rejections is respectfully requested.

The Rejection of Claim 22 Under 35 U.S.C. § 103(a) Should be Withdrawn

With respect to dependent claim 22, the Examiner contends that the “absolute value measurement of the axial extent of each second rubber decoupling layer in claim 22, there is no limitation on the size of the Koyama et al tires and therefore the larger size tires would necessarily meet the claimed broad range of greater than 3 mm.” (Page 8)

Applicants respectfully disagree. There is no teaching in either Koyama or Cuthbertson to have the rubber layer extend beyond the lateral ends of the cords.

As shown in Figure 4 of Koyama and Figure 1 of Cuthbertson, the cords and the rubber layers extend the full width of the ply. There is no showing of any rubber layer extending beyond the width of the cord. Applicants note that laminated plies are traditionally cut into a desired width whereby the cords and the rubber layer extend the full width of the cut laminated ply. There is simply no teaching in the art to extend a rubber layer beyond a cord layer, as is required in claim 22. For this additional reason, claim 22 is not obvious over the cited art.

Double Patenting Rejection

Claims 1, 4/1, 5/1, 6-8/5/1, 10/5/1, 11-13/10/5/1, 14/5/1, and 20-22/5/1 are provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 3, 7, 8, 11, and 15 of copending Application No. 09/823,543 (Office Action at §§ 17,18). The Office Action asserts that “[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 5/1 of this application are generic to claim 3 of 09/823,543” (Office Action at § 18). Further, claim 9 is provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 3 and 11 of copending Application No. 09/823,543 in view of

Mechanics of Pneumatic Tires (Office Action at § 19). Applicants will submit a terminal disclaimer, if appropriate, upon finding of allowable subject matter.


CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request withdrawal of the outstanding objections and rejections, and allowance of the pending claims. Applicants do not believe that any fee, other than an extension of time fee and an additional claim fee, is required in connection with this submission. However, should any other fee be required, the Commissioner is hereby authorized to charge any such fee to Deposit Account 02-4377. Duplicate copies of this sheet are enclosed.

Respectfully submitted,

BAKER BOTTS L.L.P.

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EXHIBIT A

Marked-up version of amended the specification

On page 1, line 6, please replace the paragraph beginning with "RADIAL TIRE CROWN REINFORCEMENT" with the following paragraph:

[RADIAL] TIRE CROWN REINFORCEMENT WITH SPECIFIED RUBBER
DECOUPLING LAYERS

On page 3, please replace paragraph [0013] with the following paragraph:

[0013] Upon a sinusoidal stress of a rubbery compound, for example, with deformation applied, $[\dot{\alpha}^* = \dot{\alpha}_0 e^{j\omega t}]$ $\underline{\epsilon^* = \epsilon_0 e^{j\omega t}}$, the steady state response of that compound is also sinusoidal and dephased by an angle $[\dot{\alpha}, \dot{\sigma}^* = \dot{\sigma}_0 e^{j(\omega t + \delta)}]$ $\underline{\delta, \sigma^* = \sigma_0 e^{j(\omega t + \delta)}}$. A complex modulus $G^* = [\dot{\sigma}^*/\dot{\alpha}^* = \dot{\sigma}_0/\dot{\alpha}_0 e^{j\delta}]$ $\underline{\sigma^*/\epsilon^* = \sigma_0/\epsilon_0 e^{j\delta}} = G' + jG''$ is defined, with $[\dot{\sigma}]$ $\underline{\sigma}$ the [strain] stress in MPa. G' is called "dynamic modulus" and G'' is called dynamic modulus of loss. The $[\tan \delta]$ $\underline{\tan \delta} = G''/G'$ ratio is called damping ratio. The measurements are made on alternate shear stress at a frequency of 10 Hz, at a temperature of 60°C and at a peak-to-peak dynamic deformation of 10%.

On page 5, please replace paragraph [0017] with the following paragraph:

[0017] A first decoupling layer is placed between the center part of the two superposed reinforcing plies and a second decoupling layer is placed on at least one side of the first layer and extends at least as far as the corresponding lateral ends of the two superposed reinforcing plies. In a particular embodiment, a second decoupling layer extends axially more than 3 mm beyond a lateral end of the cords of a reinforcing ply.

On page 8, please replace paragraph [0031] with the following paragraph:

[0031] In the lateral part of the crown, the cords of the two plies 3 and 4 are in contact with a second rubber decoupling layer 10 of modulus of elasticity less than that of the first layer. The ratio of moduli ranges between 0.05 and [0.08] 0.8 and preferably between 0.4 and 0.6 and more preferably between 0.5 and 0.7. That layer of lower modulus limits the amplitude of the maximum shear stresses at the ends of the plies and therefore limits the energies dissipated by hysteresis on rolling.

On page 11, please replace paragraph [0046] with the following paragraph:

[0046] The modulus of elasticity and/or the damping ratio, [tg] tan δ of the two layers 25 and 26 can vary like the two working variants previously described.

EXHIBIT B

Marked-up version of the amended claims

1. (amended) A tire comprising a crown, two sidewalls and two beads, a carcass reinforcement anchored in [the two] said beads and a belt reinforcement [, said] ;

wherein said belt reinforcement [comprising at least] comprises two superposed reinforcing [plies] rows formed by cords parallel in each [ply] row and criss-crossed from one [ply] row to the other by forming angles (α , β) with the circumferential direction ranging between 10° and 70° [, characterized in that,] ;

wherein between said [two superposed] reinforcing [plies] rows, at least two rubber decoupling layers of different mechanical properties are placed axially adjacent, and [in that,] ;

wherein each of said [two] rubber decoupling layers is in contact with [the] said cords of said [two superposed] reinforcing [plies] rows.

5. (amended) [A tire according to one of Claims 1 or 2, in which] The tire of Claim 1;

wherein a first rubber decoupling layer is placed between the center part of [the said two superposed reinforcing plies, and in which] said reinforcing rows; and

wherein a second rubber decoupling layer is placed on at least one side of [the] said first rubber decoupling layer and extends at least as far as the corresponding lateral ends of [the said two superposed] said reinforcing [plies] rows.

6. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the ratio between the moduli of elasticity of [the] said second rubber decoupling layer and [the] said first rubber decoupling layer ranges between 0.05 and 0.8.

7. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the ratio between the moduli of elasticity of [the] said second rubber decoupling layer and [the] said first rubber decoupling layer ranges between 0.5 and 0.7.

8. (amended) [A tire according to] The tire of Claim 5, [in which the] wherein said second rubber decoupling layer has a damping ratio $[tg \delta]$ $\tan \delta$ less than that of [the] said first rubber decoupling layer.

9. (amended) [A tire according to] The tire of Claim 8, [in which the] wherein said second rubber decoupling layer has a damping ratio $[tg \delta]$ $\tan \delta$ below 0.08 measured at a frequency of 10 Hz, at a temperature of 60°C, and at a peak-to-peak dynamic deformation of 10%.

10. (amended) [A tire according to] The tire of Claim 5, [in which the] wherein said belt reinforcement comprises, on the same side as [the] said second rubber decoupling layer, an additional reinforcing [ply] row of cords oriented in the circumferential direction and extending axially roughly like [the] said second rubber decoupling layer.

11. (amended) [A tire according to] The tire of Claim 10, [in which the] wherein said additional reinforcing [ply] row is placed radially outside [the two superposed] said reinforcing [plies] rows.

12. (amended) [A tire according to] The tire of Claim 10, [in which the] wherein said additional reinforcing [ply] row is placed radially inside [the two superposed] said reinforcing [plies] rows.

13. (amended) [A tire according to] The tire of Claim 10, [in which the] wherein said additional reinforcing [ply] row is placed radially between [the said two superposed reinforcing plies] said reinforcing rows.

14. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the H/W aspect ratio is greater than 0.55.

15. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the ratio between the moduli of elasticity of [the] said second rubber decoupling layer and [the] said first rubber decoupling layer ranges between 1.2 and 20.

16. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the ratio between the moduli of elasticity of [the] said second rubber decoupling layer and [the] said first rubber decoupling layer ranges between 1.5 and 10.

17. (amended) [A tire according to] The tire of Claim 15, [in which the] wherein said first rubber decoupling layer has a damping ratio $[tg \delta]$ $\tan \delta$ below that of [the] said second rubber decoupling layer.

18. (amended) [A tire according to] The tire of Claim 17, [in which the] wherein said first rubber decoupling layer has a damping ratio $[tg \delta]$ $\tan \delta$ below 0.08 measured at a frequency of 10 Hz, at a temperature of 60°C, and at a peak-to-peak dynamic deformation of 10%.

19. (amended) [A tire according to] The tire of Claim 15, [in which] wherein the H/W aspect ratio is less than 0.55.

20. (amended) [A tire according to] The tire of Claim 5, [in which] wherein the zone of contact between [the] said cords of [the crown reinforcing ply] said reinforcing row whose axial width is [smallest] the smaller of the two and [the] said second rubber decoupling layer is axially greater than 5 mm.

21. (amended) A tire according to Claim 5, in which the zone of contact between [the] said cords of [the crown reinforcing ply] said reinforcing row whose axial width is [smallest] the smaller of the two and [the] said second rubber decoupling layer ranges axially between 20 mm and 1/3 the axial width of [the said crown reinforcing ply] said reinforcing row.

22. (amended) [A tire according to] The tire of Claim 5, [in which the said second layers extend] wherein each second rubber decoupling layer extends axially more than 3 mm beyond the lateral ends of [the] said cords of said [crown] reinforcing [plies] rows.

EXHIBIT C

Pending claims in Application No. 09/823,542 as of November 24, 2002

1. (amended) A tire comprising a crown, two sidewalls and two beads, a carcass reinforcement anchored in said beads and a belt reinforcement;

wherein said belt reinforcement comprises two superposed reinforcing rows formed by cords parallel in each row and criss-crossed from one row to the other by forming angles (α , β) with the circumferential direction ranging between 10° and 70° ;

wherein between said reinforcing rows, at least two rubber decoupling layers of different mechanical properties are placed axially adjacent; and

wherein each of said rubber decoupling layers is in contact with said cords of said reinforcing rows.

2. (withdrawn from consideration by the Examiner) A tire comprising a crown, two sidewalls and two beads, a carcass reinforcement anchored in the two beads and a belt reinforcement, said carcass reinforcement comprising at least one reinforcing ply made up of parallel cords forming an angles roughly equal to 90° with the circumferential direction and said belt reinforcement comprising at least one reinforcing ply made up of parallel cords forming angles α with the circumferential direction ranging between 10° and 70° , characterized in that, between said crown reinforcing ply and said carcass reinforcing ply, at least two rubber decoupling layers of different mechanical properties are placed axially adjacent, and in that each of said two rubber decoupling layers is in contact with the cords of said two superposed reinforcing plies.

3. (withdrawn from consideration by the Examiner) A tire according to Claim 2, in which the belt reinforcement consists of a reinforcing ply made up of parallel wires forming an angle α with the circumferential direction ranging between 10° and 70° and of a reinforcing ply made up of parallel cords oriented roughly circumferentially.

4. (canceled)

5. (amended) The tire of Claim 1; wherein a first rubber decoupling layer is placed between the center part of said reinforcing rows; and

wherein a second rubber decoupling layer is placed on at least one side of said first rubber decoupling layer and extends at least as far as the corresponding lateral ends of said reinforcing rows.

6. (amended) The tire of Claim 5, wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 0.05 and 0.8.

7. (amended) The tire of Claim 5, wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 0.5 and 0.7.

8. (amended) The tire of Claim 5, wherein said second rubber decoupling layer has a damping ratio $\tan \delta$ less than that of said first rubber decoupling layer.

9. (amended) The tire of Claim 8, wherein said second rubber decoupling layer has a damping ratio $\tan \delta$ below 0.08 measured at a frequency of 10 Hz, at a temperature of 60°C , and at a peak-to-peak dynamic deformation of 10%.

10. (amended) The tire of Claim 5, wherein said belt reinforcement comprises, on the same side as said second rubber decoupling layer, an additional reinforcing row of cords oriented in the circumferential direction and extending axially roughly like said second rubber decoupling layer.

11. (amended) The tire of Claim 10, wherein said additional reinforcing row is placed radially outside said reinforcing rows.

12. (amended) The tire of Claim 10, wherein said additional reinforcing row is placed radially inside said reinforcing rows.

13. (amended) The tire of Claim 10, wherein said additional reinforcing row is placed radially between said reinforcing rows.

14. (amended) The tire of Claim 5, wherein the H/W aspect ratio is greater than 0.55.

15. (amended) The tire of Claim 5, wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 1.2 and 20.

16. (amended) The tire of Claim 5, wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 1.5 and 10.

17. (amended) The tire of Claim 15, wherein said first rubber decoupling layer has a damping ratio $\tan \delta$ below that of said second rubber decoupling layer.

18. (amended) The tire of Claim 17, wherein said first rubber decoupling layer has a damping ratio $\tan \delta$ below 0.08 measured at a frequency of 10 Hz, at a temperature of 60°C, and at a peak-to-peak dynamic deformation of 10%.

19. (amended) The tire of Claim 15, wherein the H/W aspect ratio is less than 0.55.

20. (amended) The tire of Claim 5, wherein the zone of contact between said cords of said reinforcing row whose axial width is the smaller of the two and said second rubber decoupling layer is axially greater than 5 mm.

21. (amended) A tire according to Claim 5, in which the zone of contact between said cords of said reinforcing row whose axial width is the smaller of the two and said second rubber decoupling layer ranges axially between 20 mm and 1/3 the axial width of said reinforcing row.

22. (amended) The tire of Claim 5, wherein each second rubber decoupling layer extends axially more than 3 mm beyond the lateral ends of said cords of said reinforcing rows.

23. (new) A tire comprising a crown, two sidewalls and two beads, a carcass reinforcement anchored in the two beads and a belt reinforcement, wherein said belt reinforcement comprises two superposed reinforcing rows formed by cords parallel in each row, and criss-crossed from one row to the other row by forming angles (α , β) with the circumferential direction ranging between 10° and 70°;

wherein between said reinforcing rows, at least two rubber decoupling layers of different mechanical properties are placed axially adjacent;

wherein at least two of said rubber decoupling layers is in contact with said cords of said reinforcing rows;

wherein a first rubber decoupling layer is placed between the center part of said reinforcing rows;

wherein a second rubber decoupling layer is placed on at least one side of said first rubber decoupling layer and extends at least as far as the corresponding lateral ends of said reinforcing rows; and

wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 1.2 and 20.

24. (new) The tire of Claim 23, wherein the ratio between the moduli of elasticity of said second rubber decoupling layer and said first rubber decoupling layer ranges between 1.5 and 10.

25. (new) The tire of Claim 23, wherein said first rubber decoupling layer has a damping ratio $\tan \delta$ below that of said second rubber decoupling layer.

26. (new) The tire of Claim 25, wherein said first rubber decoupling layer has a damping ratio $\tan \delta$ below 0.08.

27. (new) The tire of Claim 23, wherein the H/W aspect ratio is less than 0.55.

28. (new) The tire of Claim 23, wherein the zone of contact between said cords of the reinforcing row whose axial width is smaller and said second rubber decoupling layer is axially greater than 5 mm.

29. (new) The tire of Claim 23, wherein the zone of contact between said cords of the reinforcing row whose axial width is smaller and said second rubber decoupling layer ranges axially between 20 mm and $\frac{1}{3}$ the axial width of said crown reinforcing row.

30. (new) The tire of Claim 23, wherein said second rubber decoupling layer extends axially more than 3 mm beyond the lateral ends of said cords of said reinforcing row.